

# IRON SHIP.

(Received at London Office, Rec'd Oct. 11, 1883) 1884

No. *6449* Survey held at *Glasgow* Date, First Survey *29<sup>th</sup> May 1883* Last Survey *5<sup>th</sup> March*

On the *Steamer "Dunedin"*

TONNAGE under  
Tonnage Deck } *1056.84*  
Ditto of Third Spar } *123.69*  
or Jerning Deck } *13.19*  
Ditto of Poop, or } *94.16*  
Raised Qr. Dk. }  
Ditto of Houses } *5.34*  
on Deck }  
Ditto of Forecastle } *29.46*  
Gross Tonnage } *1325.68*  
Less Crew Space } *43.41*  
Less Engine Room } *1282.24*  
Register Tonnage } *424.22*  
as cut on Beam } *858.05*

ONE, OR TWO DECKED, THREE DECKED VESSEL,  
SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) . . . . . *16.90*  
Depth from upper part of Keel to top of Upper Deck Beams *19.16*  
Girth of Half-Midship Frame (as per Rule) . . . . . *32.90*  
1st Number . . . . . *68.96*  
1st Number, if a 3-Decked Vessel deduct 7 feet  
Length . . . . . *238.4*  
2nd Number . . . . . *164.61*  
Proportions— Breadths to Length . . . . . *7.06*  
Depths to Length— *Upper Deck to Keel* . . . . . *12.45*  
Main Deck ditto . . . . .

Master *Alex. Campbell*  
Built at *Glasgow*  
When built *1884* Launched *13<sup>th</sup> Feb*  
By whom built *Alex. Stephen & Sons*  
Owners *Anderson & McIntosh*  
Residence *36, Constitution, Leith.*  
Port belonging to *Leith*  
Destined Voyage *Odessa*  
If Surveyed while Building, Afloat, or in Dry Dock.  
*Built under Special Survey*

LENGTH on deck as per Rule . . . *238.4* BREADTH— Moulded . . . *33.8* DEPTH top of Floors to Upper Deck Beams . . . *19.16* Do. do. Main Deck Beams . . . *12.45* Power of Engines . . . *140* Horse. *140* N<sup>o</sup>. of Decks with flat laid *One* N<sup>o</sup>. of Tiers of Beams *Two*

Dimensions of Ship per Register, length, *240.6* breadth, *34.15* depth, *14.3*

|  | Inches in Ship.      | Inches per Rule.     |  | Inches in Ship.        | Inches per Rule.       |
|--|----------------------|----------------------|--|------------------------|------------------------|
| KEEL, depth and thickness . . . . .  | <i>8 1/2 x 2 1/2</i> | <i>8 1/2 x 2 1/2</i> | FLAT KEEL PLATES, breadth and thickness . . . . .  | <i>39</i>              | <i>11</i>              |
| STEM, moulding and thickness . . . . .   | <i>8 x 2 1/2</i>     | <i>8 x 2 1/2</i>     | PLATES in Garboard Strakes, br'dth & thickness . . . . .   | <i>39</i>              | <i>11</i>              |
| STERN-POST for Rudder do. do. . . . .  | <i>8 x 5</i>         | <i>8 x 5</i>         | From Garboard to upper part of Bilges . . . . .  | <i>9 x 10</i>          | <i>9 x 10</i>          |
| " " for Propeller . . . . .  | <i>8 x 5</i>         | <i>8 x 5</i>         | Of d'ble at Bilge, or increased thickness, and length applied <i>half length</i> . . . . .         | <i>1</i>               | <i>1</i>               |
| Distance of Frames from moulding edge to moulding edge, all fore and aft . . . . .                         | <i>23</i>            | <i>23</i>            | From up. prt of Bilge to lr. edge of Sh'rstrake . . . . .  | <i>9 x 10</i>          | <i>9 x 10</i>          |
| FRAMES, Angle Iron, for 1/2 length amidships . . . . .   | <i>4 1/2 x 3</i>     | <i>4 1/2 x 3</i>     | Main Sheerstrake, breadth and thickness . . . . .  | <i>36</i>              | <i>14</i>              |
| Do. for 1/2 at each end . . . . .  | <i>4 1/2 x 3</i>     | <i>4 1/2 x 3</i>     | Of d'ble at Sh'stk. & lng. applied <i>1/2 length</i> . . . . .                                     | <i>9</i>               | <i>9</i>               |
| REVERSED FRAMES, Angle Iron . . . . .  | <i>3 x 3</i>         | <i>3 x 3</i>         | From M. n. to Up. or Spar Dk. Sh'rstrake . . . . .   | <i>8</i>               | <i>8</i>               |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships . . . . .                 | <i>21</i>            | <i>8</i>             | Up. or Spar Dk Sh'rstrake, br'dth & thickness . . . . .  | <i>19 1/2 x 11 1/2</i> | <i>19 1/2 x 11 1/2</i> |
| " thickness at the ends of vessel . . . . .  | <i>10 1/2</i>        | <i>4</i>             | Butt Straps to outside plating, breadth & thickness . . . . .                                      | <i>14 1/2 x 9 1/2</i>  | <i>14 1/2 x 9 1/2</i>  |
| " depth at 3/4 the half-bdth. as per Rule . . . . .  | <i>42</i>            | <i>42</i>            | Lengths of Plating . . . . .   | <i>6</i>               | <i>10</i>              |
| " height extended at the Bilges . . . . .  | <i>42</i>            | <i>42</i>            | Shifts of Plating, and Stringers . . . . .   | <i>2</i>               | <i>2</i>               |
| BEAMS, <i>Upper, Spar, or Awning Deck</i> Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <i>6 x 3</i> | <i>8</i>             | <i>5 1/2 x 3</i>     | Gunwale Plate on ends of <i>Awning, Spar, or</i> Upper Deck Beams, breadth and thickness . . . . . | <i>36</i>              | <i>10</i>              |
| Single or double Angle Iron on Upper edge . . . . .  | <i>23</i>            | <i>23</i>            | Angle Iron on ditto . . . . .  | <i>5 x 3 1/2 x 9</i>   | <i>5 x 3 1/2 x 9</i>   |
| Average space . . . . .  | <i>23</i>            | <i>23</i>            | Tie Plates fore and aft, outside Hatchways . . . . .   | <i>6</i>               | <i>6</i>               |
| BEAMS, <i>Main, or Middle Deck</i> Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <i>4 x 3 1/2</i>    | <i>8</i>             | <i>4 x 3 1/2</i>     | Diagonal Tie Plates on Beams No. of Pairs . . . . .  | <i>6</i>               | <i>6</i>               |
| Single or double Angle Iron on Upper Edge . . . . .  | <i>23</i>            | <i>23</i>            | Flat of Up., Spar, or Awning Dk. * . . . .   | <i>90</i>              | <i>mod deck line</i>   |
| Average space . . . . .  | <i>23</i>            | <i>23</i>            | How fastened to Beams . . . . .  |                        |                        |
| BEAMS, <i>Lower Deck</i> Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <i>4 x 3 1/2</i>              | <i>8</i>             | <i>4 x 3 1/2</i>     | Stringer Plate on ends of Main or Middle Deck } Beams, breadth and thickness . . . . .             |                        |                        |
| Single or double Angle Iron on Upper Edge . . . . .  | <i>23</i>            | <i>23</i>            | Is the Stringer Plate attached to the outside plating? . . . . .                                   |                        |                        |
| Average space . . . . .  | <i>23</i>            | <i>23</i>            | Angle Irons on ditto, No. . . . .  |                        |                        |
| BEAMS, <i>Hold, or Orlop</i> Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <i>4 x 3 1/2</i>          | <i>8</i>             | <i>4 x 3 1/2</i>     | Tie Plates, outside Hatchways . . . . .  |                        |                        |
| Single or double Angle Iron on Upper Edge . . . . .  | <i>23</i>            | <i>23</i>            | Diagonal Tie Plates on Beams, No. of pairs . . . . .   |                        |                        |
| Average space . . . . .  | <i>23</i>            | <i>23</i>            | Flat of Middle Deck* do. . . . .   |                        |                        |
| KEELSONS Centre line, single or double plate, } <i>16</i>  | <i>12</i>            | <i>16</i>            | How fastened to Beams . . . . .  |                        |                        |
| box, or Intercoastal, Plates . . . . .   | <i>11</i>            | <i>12</i>            | Stringer Plates on ends of Lower Deck, Hold or Orlop Beams . . . . .                               | <i>31</i>              | <i>9</i>               |
| " Rider Plate . . . . .  | <i>11</i>            | <i>12</i>            | Is the Stringer Plate attached to the outside plating? . . . . .                                   | <i>yes</i>             |                        |
| " Bulb Plate to Intercoastal Keelson . . . . .   | <i>5</i>             | <i>3 1/2 x 9</i>     | Angle Irons on ditto, No. <i>4</i> . . . . .   | <i>4 x 4 x 8</i>       | <i>4 x 4 x 8</i>       |
| " Angle Irons . . . . .  | <i>5</i>             | <i>3 1/2 x 9</i>     | Stringer or Tie Plates, outside Hatchways . . . . .  | <i>5 x 3 1/2 x 9</i>   | <i>5 x 3 1/2 x 9</i>   |
| " Double Angle Iron Side Keelson . . . . .   | <i>5</i>             | <i>3 1/2 x 9</i>     | Flat of Lower Deck* . . . . .  |                        |                        |
| " Side Intercoastal Plate . . . . .  | <i>5</i>             | <i>3 1/2 x 9</i>     |  |                        |                        |
| " do. Angle Irons . . . . .  | <i>5</i>             | <i>3 1/2 x 9</i>     |  |                        |                        |
| " Attached to outside plating with angle iron . . . . .  | <i>3 1/2</i>         | <i>3 x 4</i>         |  |                        |                        |
| BILGE Angle Irons . . . . .  | <i>5</i>             | <i>3 1/2 x 9</i>     |  |                        |                        |
| " do. Bulb Iron . . . . .  | <i>8</i>             | <i>8</i>             |  |                        |                        |
| " do. Intercoastal plates riveted to plating for <i>half length</i> . . . . .                              | <i>5</i>             | <i>3 1/2 x 9</i>     |  |                        |                        |
| BILGE STRINGER Angle Irons . . . . .   | <i>5</i>             | <i>3 1/2 x 9</i>     |  |                        |                        |
| Intercoastal plates riveted to plating for <i>half length</i> . . . . .                                    | <i>8</i>             | <i>8</i>             |  |                        |                        |
| SIDE STRINGER Angle Irons . . . . .  | <i>5</i>             | <i>3 1/2 x 9</i>     |  |                        |                        |
| Intercoastal plates riveted to plating for <i>half length</i> . . . . .                                    | <i>8</i>             | <i>8</i>             |  |                        |                        |

The FRAMES extend in one length from *Keel* to *Gunwale* Riveted through plates with *3/8* in. Rivets, about *1/4* apart.  
The REVERSED ANGLE IRONS on floors and frames extend from middle line to *Pro R. & S. Stringer plate* and to *Hold Stringer plate* alternately.  
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? *yes* And butts properly shifted? *yes*  
PLATING. Garboard, double riveted to Keel, with rivets *1 1/8* in. diameter, averaging *5 1/2* ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *3 1/2* ins. from centre to centre.  
Butts of *Three* Strakes at Bilge for *half* length, treble riveted with Butt Straps *1/4* in. thicker than the plates they connect.  
Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from cr. to cr.  
Lower Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.  
Butts of Main Sheerstrake, treble riveted for *half* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *length* amidships.  
Butts of Main Stringer Plate, treble riveted for *half* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *length* amidships.  
Breadth of laps of plating in double riveting *6 x 5 1/2* ins. Breadth of laps of plating in single riveting *6 x 5 1/2* ins.  
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *treble and double* No. of Breasthooks, *5* Crutches, *4*  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Best*  
Manufacturer's name or trade mark, *Phoenix, Consett, Jones Bros & Co.*  
The above is a correct description.  
Builder's Signature, *Alex. Stephen & Sons* Surveyor's Signature, *J. J. House*  
Surveyor to Lloyd's Register of British and Foreign Shipping.



Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 6449 96  
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *Yes*  
Are the fillings between the ribs and plates solid single pieces? *Yes*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes*  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*  
Do any rivets break into or through the seams or butts of the plating? *A few*

Masts, Bowsprit, Yards, &c., are *now* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.  
State also Length and Diameter of Lower Masts and Bowsprit *Rig - Fore and aft schooner.*

*Two pole masts (Pitch pine) 20 ins. diameter*

| NUMBER for EQUIPMENT 18/04 |                            | Fathoms. | Inches. | Test per Certificate. | Inches per Rule. | Machine where Tested & Suprntd.    | ANCHORS.   | N <sup>o</sup> . | Weight. Ex. Stock. | Test per Certificate | Wght req'd per Rule. | Machine where Tested & Suprntd. |
|----------------------------|----------------------------|----------|---------|-----------------------|------------------|------------------------------------|--|------------------|--------------------|----------------------|----------------------|---------------------------------|
| SAILS.                     |                            |          |         |                       |                  |                                    |  |                  |                    |                      |                      |                                 |
| N <sup>o</sup> .           | CABLES, &c.                |          |         |                       |                  |                                    |  |                  |                    |                      |                      |                                 |
| Fore Sails,                | Chain .....                | 24 1/2   | 1 7/8   | 35.61.4<br>7.5 43.9   | 2 1/2 x 1 1/2    | <i>Glagon</i><br><i>3/10 42.84</i> | Bower Anchors  | 998              | 24.0.6             | 24.12.2.4            | 23 1/2               |                                 |
| Fore Top Sails,            | Iron Stream Chain          | 45       | 1       | 13.5 24<br>7.3 18     | 1 5/8 x 1        | <i>Glagon</i><br><i>15/2 84</i>    | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) | 1020             | 23.3.14            | 23.15.2.4            | 23 1/2               |                                 |
| Fore Topmast Stay Sails,   | or Steel Wire ..           |          |         |                       |                  |                                    |  | 994              | 20.0.6             | 20.15.0.0            | 20                   |                                 |
|                            | or Hempen Strm Cable ..... |          |         |                       |                  |                                    |  |                  |                    |                      |                      |                                 |
| Main Sails,                | Towline, Hemp.             | 90       | 3 1/4   | 13.5 22               | 90 x 3 1/4       | <i>Glagon</i><br><i>14/2 84</i>    | Stream Anchor  | 996              | 4.3.21             | 10.2.2.0             | 8                    |                                 |
| Main Top Sails,            | or Steel Wire ..           | 90       | 8       | 13.5 22               | 90 x 8           | <i>Glagon</i><br><i>14/2 84</i>    | Kedge  | 995              | 4.0.6              | 6.8.3.0              | 4                    |                                 |
| and                        | Hawser <i>Manila</i>       | 90       | 2 1/4   | 13.5 22               | 90 x 2 1/4       | <i>Glagon</i><br><i>14/2 84</i>    | 2nd Kedge  | 994              | 2.0.26             | 4.15.0.0             | 2                    |                                 |
|                            | Warp <i>Steel Wire</i>     |          |         |                       |                  |                                    |  |                  |                    |                      |                      |                                 |
|                            | quality <i>good</i>        |          |         |                       |                  |                                    |  |                  |                    |                      |                      |                                 |

Standing and Running Rigging *Misc Manila* sufficient in size and *good* in quality. She has *1-22ft. Long Boat*, and *1-18ft. Dingy*

The Windlass is *Emerson, Walker & Co.* Capstan *patent* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Yark framing* How secured in ordinary weather? *Angle iron coming bolts.*

What arrangements for deadlights in bad weather? *Shutters with bulls' eyes fitted in same.*

Coal Bunker Openings. How constructed? *Conning plates* How are lids secured? *Arch bars* Height above deck? *16 ins*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *On each side - Before bridge, three*

*freering ports 3' 1 1/2 x 1' 1 1/2, two scuppers, & two morning pipes. Aft bridge, three freering ports 3' 1 1/2 x 1' 1 1/2, three*

Cargo Hatchways. How formed? *Deep plates forming Conning and Carling* *scuppers and two morning pipes*

State size *Main Hatch* *11' 6" x 10' 0"* *No. 2 Fore hatch* *11' 5" x 10' 0"* *No. 3* *11' 5" x 10' 0"* *No. 4* *11' 5" x 10' 0"* *No. 5* *11' 5" x 10' 0"*

If of extraordinary size, state how framed and secured? *In way of Nos. 2 and 4 Hatchways iron deck 8 1/8 in thickness.*

What arrangement for shifting beams? *Two deep web plates in No. 2 and in No. 4 Hatchways. Three fore & afters in same Hatchways.*

Hatches. If strong and efficient? *yes*

|  |   |  |
|--|---|--|
| Order for Special Survey No. <i>1883</i>     | 1st. On the several parts of the frame, when in place, and before the plating was wrought | <i>1883. May 29. June 1, 6, 21, 26 &amp; 29</i>                                    |
| Date <i>2nd May 1883</i>                     | 2nd. On the plating during the process of riveting  | <i>July 5 &amp; 11. Aug 10, 15, 17 &amp; 23. Sept 4, 17 &amp; 24.</i>              |
| Order for Ordinary Survey No. <i>1883</i>    | 3rd. When the beams were in and fastened, and before the decks were laid....              | <i>Oct 1, 2, 5, 10, 12, 17, 23, 26, 30 &amp; 31. Nov 2, 8, 12, 20, 21 &amp; 23</i> |
| Date <i>1883</i>                             | 4th. When the ship was complete, and before the plating was finally coated or cemented..  | <i>Dec 5, 7, 10, 11, 18, 22 &amp; 28. Jan 4, 9, 10, 16, 19, 22, 25 &amp; 29.</i>   |
| No. <i>284</i> in builder's yard.            | 5th. After the ship was launched and equipped   | <i>Feb 4, 8, 13, 14, 19, 22, 25 &amp; 29. March 5.</i>                             |
| State dates of letters respecting this case. |   | <i>10th March, 9th April and 14th Aug 1883.</i>                                    |

General Remarks (State quality of workmanship, &c.)

*The quality of workmanship and material is good.*

*This vessel has been built in conformity with the approved plans (2 m) of the sister vessel "Clan Davidson" attached hereto, the instruction contained in the Secretary's letter relating thereto, and otherwise in compliance with the Rules with a view to the class contemplated.*

*The foremast bulkhead, after peak tank, midship, deep tank and double bottom under engines and boilers have been tested as required by the Rules.*

*One decked vessel. Bridge 5 1/2 feet. Forecastle 28 feet. Raised quarter deck 8 1/2 feet.*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate forms)

How are the surfaces preserved from oxidation? Inside *Paint and Cement* Outside *Paint*

I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee .....£ *4* : *0* : *0* is received by me, *(Signature)*

Special .....£ *54* : *1* : *0* *5/31* 1884

(to be sent as per margin). Certificate ... *0* : *0* : *0*

(Travelling Expenses, if any, £ .....).

Committee's Minute *FRIDAY 7 MARCH 1884* 18

Character assigned *100 A 1* *18th Nov*

*(Signature)* *(Signature)*

*(Signature)* *(Signature)*

*(Signature)* *(Signature)*

*(Signature)* *(Signature)*

*(Signature)* *(Signature)*